

IN THE SPECIFICATION:

On page 3, lines 8-10, please amend the paragraph to read as follows:

The current invention is related to the inventor's invention in U.S. Patent Application Serial No. 09/678,931, filed October 4, 2000, now U.S. Patent No. 6,705,976, the contents of which are hereby incorporated herein by reference.

On page 3, after line 10, insert the following paragraphs:

Fig. 1 herein, which is identical to Fig. 1 of the Application Serial No. 09/678,931, is an X-ray side top perspective view of exercise equipment 10 having seven pairs of pulleys, one which is identified as 11, placed in an arcuate slot formed by two side frames 12, with each pair spaced approximately 30° away from its neighboring pulley pairs. A greater or smaller number of pulley pairs can be used. The resistance, a weight stack 13, is comprised of a number of small weights that can be used in combination.

The number of weights in the weight stack is selectable by the users.

Fig. 2 shows a side view of the exercise equipment 10 with the side panel removed. The proximal end of each of the cables 9, outside the pulley pairs 11, is attached to a means that enables a user exert force against the resistance. Examples of those means are a bar 100, a loop handle 102, a cuff 103, all of which have a fastener 101.1 that enables them to be attached to a fastening point 101 at the proximal end of any one of the cables 9. The bar 100, loop handle 102 and cuff 103 may be mixed or matched at the proximal ends of cables 9.

Seven cables 9 are strung from their proximal ends 101 external to the equipment 10 through the pairs of pulleys 11 from which they exit in a generally horizontal direction to the right where they pass over seven redirection pulleys 14 to change direction to vertically upward. Pulleys 14.1, of which there are also seven aligned vertically, serve to redirect the distal ends of the cables 9 from a generally vertical upward direction to a substantially horizontal direction to seven aligned pulleys 14.2 (only two of which are shown in Fig. 1) which serve redirect cables 9 to a

substantially vertical downward direction. The pulleys 14.2 and the distal ends of the cables 9 after pulleys 14.2 are shown in Fig. 5.

In operation, the user may pull one of the cables 9 to lift the weight stack 13 having the selected number of weights. Pulling any one of the cables 9 results in lifting the weights with a 1:1 ratio of cable movement to weight stack movement.

Figs. 3 and 4 show details of the weight stack and the counterweight mechanism as viewed from the back of the exercise equipment 10. Although only one counterweight 16 is shown, one such counterweight is provided for each one of the seven cables 9. As may be seen from these figures, a counterweight, upon pulling one of the cables 9, causes a plate 18 above it to be drawn upward, pulling with it a cable 9.1. This cable 9.1 is directed upward and then redirected downward to the weight stack 13. Consequently, pulling only one of the cables results in lifting the weight stack while tension is maintained on the remaining cables due to the counterweights.

On page 5, after line 12, please insert the following paragraph:

FIG. 1 is an X-ray side top isometric view of one type of exercise equipment in which the present invention may be incorporated and used.

FIG. 2 is a side view of the exercise equipment of FIG. 1 with the side panel removed.

FIG. 3 is a detailed view of the weight stack and counterweight mechanism of the exercise equipment of FIG. 1, viewed from the back of the equipment.

FIG. 4 is a detailed view of the counterweight mechanism of the exercise equipment of FIG. 1.

On page 5, lines 13-22, please amend the paragraphs to read as follows:

FIG. 4 5 is a front view of the 2:1 mechanical advantage system according to the invention.

FIG. 2 6 is a top view of the 2:1 mechanical advantage system.

FIG. 3 7A is a side view of the adjustment module of the 2:1 mechanical advantage system.

FIG. 3 7B is a front view of part of the adjustment module of the 2:1 mechanical advantage system.

FIG. 3 7C is a side view of part of the adjustment module of the 2:1 mechanical advantage system.

FIG. 3 7D is a front view of the pulley part of the 2:1 mechanical advantage system.

FIG. 4 8 is a front view of ~~the~~ a bilateral lifting system according to the invention.

On page 6, line 1, amend the paragraph to read as follows:

FIG. 5 9 is a top view of the bilateral lifting system of FIG. 8.

On page 6, lines 3-6, amend the paragraphs to read as follows:

FIGS. ~~4-3D~~ 5-7D illustrate a first aspect of the invention, i.e., the 2:1 mechanical advantage system.

FIGS. ~~4 and 5~~ 8 and 9 illustrate a second aspect of the invention i.e., the bilateral lifting system.

On page 6, lines 16-21, amend the paragraphs to read as follows:

FIG. 4 5 is a front view of the 2:1 mechanical advantage system.

FIG. 2 6 is a top view of the 2:1 mechanical advantage system.

FIG. 3 7A is a side view of the adjustment module of the 2:1 mechanical advantage system.

FIG. 3 7B is a front view of part of the adjustment module of the 2:1 mechanical advantage system.

On page 7, lines 1-3, please amend the paragraphs to read as follows:

FIG. 3 7C is a side view of part of the adjustment module of the 2:1 mechanical advantage system.

FIG. 3 7D is a front view of the pulley part of the 2:1 mechanical advantage system.

On page 7, delete lines 4-5 and lines 6-21, please amend the following two paragraphs to read as follows:

~~As far as possible, the reference numbering of the FIGS. follows that used in U.S. Patent Application Serial No. 09/678,931, filed October 4, 2000.~~

In FIG. 4 5, frame 41 of exercise equipment 40 provides means for other components of the equipment to be attached. The 2:1 mechanical advantage connector means, is shown in FIGS. 4 5 and 3 7A as a rod-type pin 1, could instead be a rod, bar, latch, switch or other type of connector means 4. Connector means 1 is inserted through a rod, bar, latch, switch or other type of cable linking means 2, which links cable 9.1 with cable 15.1 by two swaged balls 3 (or rod, bar, latch, switch or other type of other connector means) attached to the ends of cables 9.1 and 15.1, and then inserted into a rod, bar, latch, switch or other type of connector means 4. By inserting pin 1 through connector means 2 and connector means 4, which is attached to the pulley support 6, which in turn, is attached by the pulley bolt 11 inserted into lift stem 23 to make the connection with the resistance means 13, which is shown here as a lift the weight stack 13, the lifting system is converted from a 2:1 to a 1:1 movement ratio.

In particular, when ~~When~~ pin 1 is inserted through a rod, bar, latch, switch or other of type of connectors 2 and 4 and the user pulls on the attachment at the egress point of the cable, the weight stack is lifted with a 1:1 ratio of resistance movement with respect to movement of a cable 9. The cable slack created by cable 15.1 is taken up by a counter weight 16.1 connected at the distal end of cable ~~15.1~~ 9.1 as it travels over redirectional pulleys 18.1 above, allowing it to drop into guide shaft 16.2.

On page 7, lines 22-23 and page 8, lines 1-22, please amend the paragraphs to read as follows:

When pin rod, bar, latch, switch or other type of connector 1 is removed, the lifting system turns into a 2:1 mechanical advantage block and tackle system. When an exercise is performed, cable 15.1 is pulled around pulley 7 ~~and, simultaneously, the counter weight 16.1 at the distal end of cable 15.1 nests against a stop block 16.3 and creates the anchor~~ is anchored at this one end to complete the 2:1 mechanical advantage system.

The cables 9 are horizontally redirected when they pass over pulleys 14.1 and then directed vertically downward as



they pass over pulleys 14.2 where the distal ends of cables 9 are attached to counterweights 16. When the proximal end of a cable ~~9.1~~ 9 is pulled, it raises ~~the counterweights~~ its corresponding counterweight 16. A horizontal plate 18 with holes, slots or other openings cut so the cables 9 pass through the plate 18 is positioned above the counterweights 16 and extended over and attached or welded to a vertically positioned guiding means, e.g., a linear bearing 18.8 (or other guiding mechanism such as a roller system, or a bushing housed in a tube traveling on a rod, bar or other vertical support) traveling along a vertical shaft 20 positioned between the weight stack 13 and the counterweights 16. ~~Single~~ A single cable 9 9.1, which is attached to the underside of horizontal plate 18 and to a pulley 14.3 below, then routed upward to two pulleys 14.4 above the weight stack and down to ~~a plate 13.1~~ the connector 2 to ~~guide~~ pull the weights 13 vertically along two upright guide rods 22 extending downward through the weight stack 13. ~~and~~ The connector acts through a rod 23 extending downward through the center of the weight stack with holes 24 cut in it to allow a selector pin 25 to slide into the weight stack 13 so the user can select the desired

weight number of weights to lift. When the user pulls on the cable 9.1 9 end at the point of egress, the corresponding counterweight 16 is lifted, thereby lifting the horizontal plate assembly 18 and the selected weight stack 13. Other cables 9 in the system that are not engaged by the user at that time are held in the ready position by their respective counterweights 16.

On page 9, lines 1-11, please amend the paragraphs to read as follows:

The distal ends of the cables 9 are each attached to a counterweight 16, which travels vertically through a slot mounted in a housing with each slot and counterweight 16 positioned side by side at the end of each respective cable 9.1 9, (one counterweight 16 for each cable 9.1 9 threaded through the system) positioned next to the resistance, which in this case is a set of weights 13, ~~and housed within a vertical set of guide tracks 17.~~ They The counterweights are positioned within the housing on the far side of the weights, but could be positioned in other arrangements relative to the resistance. Optimal positioning is next to or adjacent to the resistance. The counterweights 16 are

optimally also positioned at or slightly beneath the top plane of the weight stack 46 13, but could be positioned above the top plate.

FIG. 4 8 is a front view of the bilateral lifting system.

FIG. 5 9 is a top view of the bilateral lifting system.